WHAT IS CLAIMED IS:

1. A carbon adsorbent for use in removing heavy metal anions from a liquid or gas medium comprising a porous carbon having a BET surface area greater than about 100 m^2/g and having incorporated therein at least one oxygen-containing compound of at least one metal selected from the group consisting of iron, copper and aluminum, or combinations thereof.

2. The adsorbent according to claim 1, wherein said oxygen-containing compound of metal is incorporated into said porous carbon by impregnation or dispersion within said adsorbent.

3. The adsorbent according to claim 1, wherein said oxygen-containing compound of metal is an oxide or hydroxide.

4. The adsorbent according to claim 1, wherein said heavy metal is selected from the group consisting of arsenic, selenium and combinations thereof.

5. The adsorbent according to claim 1, wherein said adsorbent has a micropore volume of greater than about 20 $cm^3/100g$.

6. The adsorbent according to claim 1, wherein said metal is present at a concentration of up to about 50% by weight of said carbon.

7. An adsorbent for removing metal anions from a liquid or gas medium surrounding said adsorbent, said adsorbent comprising a porous carbon having incorporated therein at least one oxygen-containing compound of at least one metal selected from the group consisting of iron, copper and aluminum or combinations thereof, wherein said metal is present at a concentration in the range from about 0.01 to about 50 percent by weight of said porous carbon; said oxygen-containing compound being

selected from the group consisting of oxides, hydroxides and combinations thereof; and said adsorbent having a BET surface area greater than about 100 m^2/g.

8. A method for making a carbon adsorbent for use in removing metal anions from a liquid or gas medium containing metal anions comprising the steps of:

(1) providing a porous carbonaceous adsorbent;

(2) impregnating said porous carbonaceous adsorbent with a solution comprising at least one compound of at least one metal selected from the group consisting of iron, copper, and aluminum or combinations thereof; and

(3) converting said compound into an oxygen-containing compound of said metal to produce said carbon adsorbent.

9. The method according to claim 8, wherein said porous carbonaceous adsorbent is an activated carbon.

10. The method according to claim 8, wherein said compound of said metal is selected from the group consisting of halides, nitrates, sulfates, chlorates, carboxylates having one to five carbon atoms.

11. The method according to claim 8, wherein said step of converting consists of thermal decomposition or chemical reaction.

12. The method according to claim 8, wherein said one metal is present at a concentration of up to about 50% by weight of said porous carbonaceous adsorbent.

13. The method according to claim 8, wherein said oxygen-containing compound is an oxide or hydroxide.

14. The method according to claim 9, wherein said activated carbon has a BET surface area greater than about 100 m^2/g and is selected from the group consisting of coal, wood, nut shell, petroleum residue and vegetable-based activated carbons.

15. The method according to claim 9, wherein said activated carbon is selected from the group consisting of coal, wood, nut shell, petroleum residue, vegetable-based activated carbons and has a micropore volume greater than about 20 $cm^3/100g$ of adsorbent.

16. A method for making a carbon adsorbent for use in removing metal anions from a liquid or gas medium, said method comprising the steps of:

(1) pulverizing a carbonaceous material, a binder, and at least one compound of a metal selected from the group consisting of iron, copper, and aluminum or combinations thereof to form a powdered mixture;

(2) compacting said powdered mixture into shaped objects;

(3) crushing and screening the shaped objects into a metal-containing particulate material; and

(4) gasifying said metal-containing particulate material to produce said carbon adsorbent.

17. The method according to claim 16, wherein said carbonaceous material, said binder, and said at least one compound of said metal are pulverized together.

18. The method according to claim 16, wherein said carbonaceous material, said binder, and said at least one compound of said metal are pulverized separately before said pulverized mixture is made.

19. The method according to claim 16, wherein said compacting is selected from the group consisting of briquetting, pelletizing, densifying, and extruding.

20. The method according to claim 16, wherein said gasifying is conducted under an atmosphere comprising an oxygen-containing gas at a temperature in a range from about 900^0 C to about 1100^0 C, for a time sufficient to produce an adsorbent having a BET surface area of at least 100 m^2/g.

21. The method according to claim 16 further comprising the step of oxidizing said metal-containing particulate material before the step of gasifying.

22. A method for removing heavy metal anions from a fluid or gas medium containing metal anions, said method comprising the steps of:

(1) providing an adsorbent comprising a porous carbon having a BET surface area greater than about 100 m^2/g and having deposited therein at least one oxygen-containing compound of at least one metal selected from the group consisting of iron, copper, and aluminum;

(2) contacting a portion of said medium with said adsorbent; and

(3) obtaining a treated medium having a lower concentration of said heavy metal than a concentration of said heavy metal of said medium;

wherein said anions contain oxygen; said heavy metal is selected from the group consisting of arsenic, selenium, and combinations thereof; said oxygen-containing compound is selected from the group consisting of oxides, hydroxides, and combinations thereof; said at last one metal is present at a concentration from about 0.01 to about 50 percent by weight of said porous carbon.

23. The method according to claim 22, wherein said adsorbent has a micropore volume of greater than about 20 $cm^3/100g$ of adsorbent.

24. The method according to claim 22, wherein said adsorbent has a form selected from the group consisting of granule, pellet, sphere, powder, woven fabric, non-woven fabric, mat, felt, block, and honeycomb.

25. The method according to claim 22, wherein said adsorbent is disposed at a point of use.

26. The method according claim 25, wherein said adsorbent is disposed in a fixed bed.

27. The method according claim 26, wherein said adsorbent is disposed in a section of a water supply piping of a house.

28. The method according to claim 26, wherein said fixed bed comprises a cartridge that is disposed at a water faucet.

29. The method according to claim 28, wherein said cartridge further comprises at least one adsorbent selected from the group consisting of zeolites, ion exchange resins, silica gel, alumina, and unimpregnated activated carbons.